1-64 Armor's Rogue Gunnery Training Program

by Lieutenant Colonel Eric Schwartz, Major Daniel Cormier, and Staff Sergeant Bobby Burrell

On 5 April 2003, Task Force 1st Battalion, 64th Armor Regiment (1-64 Armor), 3d Infantry Division, was directed to conduct a mounted attack into the heart of Baghdad. The goal was to destroy the enemy's will to fight by demonstrating our superiority and ability to attack into their strongpoint defenses in and around the city at will. The mission, which lasted 2 hours and 13 minutes, was to attack along Highway 8 from the south of Baghdad (Objective Saints), through the heart of the city to the Baghdad Airport (Objective Lions). Throughout the mission, the task force was in constant contact with enemy forces. The soldiers and leaders were incredulous when they first heard of the mission — they never expected to attack into a city of over 6 million inhabitants with a task force numbering just over 700 soldiers.

The soldiers who participated in the attack performed remarkably. They directly contributed to the decisive success of Operation Iraqi Freedom (OIF) as they broke the will of the enemy forces in the city, which lead to the rapid conclusion of major hostilities. The attack debunked the notion that heavy armored forces are not the weapons of choice in urban terrain. Task Force 1-64 Armor demonstrated the essential capability of heavy armored vehicles, which are able to sustain numerous hits from enemy fire, while protecting the crewmen inside. They reconfirmed that armored forces have an extreme shock effect on enemy soldiers and established a foundation for the modification of doctrine and future tactics, techniques, and procedures. The attack also revealed the necessity for armored crews to master all of their weapons systems and be prepared to engage and fight the enemy in very close terrain.

Six Months Later

The soldiers of 1-64 Armor recently completed a Level I tank gunnery, which allowed them to critically compare their experiences in OIF with the Army's tank gunnery training program. The results are a picture of many successes due to the exceptional training that tank gunnery provides. The training also revealed some clearly identified shortfalls in current gunnery training. This article addresses the shortcomings of the current gunnery training program and begins the debate and the process of modifying tank gunnery training to better prepare soldiers for future combat.

Operation Iraqi Freedom revealed a need to train armored crewmen to fight under close combat conditions and in urban terrain. The difficulties of an urban environment are numerous. The crew must acquire targets three dimensionally. The limitations of the main gun of the M1 Abrams tank, which can only elevate 20 degrees and depress 10 degrees, forces the loader and tank commander (TC) to acquire and engage targets on rooftops and in basements. The nature of close urban terrain will at times prevent the main gun from engaging targets, except those to its direct front. The enemy's ability to attack from perpendicular alleyways or doorways, and then quickly hide, prevents the tank's main gun from reacting decisively. Therefore, if crews button-up and rely on their armor protection and gunner's weapons, they limit their ability to engage enemy targets and must rely on mobility or supporting fires to survive attacks. This is a potentially deadly scenario, as the Russians learned in Grozny. These problems paint a general picture of the problems faced by tank crewmen. They present the necessity for well-trained and coordinated task force operations to adequately conduct mounted urban operations. We are not advocating tank companies as the solution to military operations in urban terrain (MOUT). We are suggesting that to integrate tanks into urban or close terrain warfare, we need to develop focused training programs for tank crews to prepare for this type of combat.

As we avoid preparing solely for past wars, we must also be willing to learn from those wars past and adjust training to better prepare soldiers. Any effort to predict future conflicts will be limited by unforeseen events. Our Nation's enemies will adapt their tactics and change their preparations based on their own conclusions and experiences in OIF. However, we can adapt our training to prepare for likely combat scenarios. Any analysis of potential future combat scenarios leads

"Operation Iraqi Freedom revealed a need to train armored crewmen to fight under close combat conditions and in urban terrain. The difficulties of an urban environment are numerous. The crew must acquire targets three dimensionally. The limitations of the main gun of the M1 Abrams tank, which can only elevate 20 degrees and depress 10 degrees, forces the loader and tank commander (TC) to acquire and engage targets on rooftops and in basements."

to the conclusion that enemy forces will seek to fight in close terrain. Close terrain, whether urban or otherwise, negates some of our technological advantages. Therefore, close terrain offers our enemies the best chances of success, and it will be the enemy's environment of choice or eventual necessity. The armor community can no longer afford to focus primarily on the conventional fight. We must adapt our training to likely future scenarios and, for the purpose of this article, tank gunnery must adapt to the changing threat environment.

Our "rogue gunnery" proposal focuses on Tank Table VIII qualification for two reasons: standards in weapons training and resource limitations prevent us from developing an ideal training system; and crew-level gunnery, from Tank Tables IV to VIII, is *ideally* a foundation for further tank crew training, but because of current limitations, it is the primary live gunnery crew training event. We developed our modifications under existing conditions and focused on tank gunnery tables as training events that have the most realistic impact on developing combat-ready crews. We also realize that current loader and TC weapons station capabilities produce some risk. Therefore, we decided to focus our modification approach on crew-level training and not at platoon or section level. This currently appears to be the safest way to integrate necessary training changes. These two factors resulted in our recommendations being focused on *immediate*, applicable, and safe changes to tank gunnery training.

To begin our analysis, we applied a systematic method to capture our lessons learned from OIF. While deployed, we conducted a tank crew survey in which every crew in the task force participated. We reviewed unit after-action reviews (AARs) and conducted interviews with key leaders, master gunners, and soldiers to accurately capture lessons learned from OIF. Our collection method stressed impartiality. The surveys were anonymous to avoid "bragging." We also stressed to crews and leaders that their comments would help to reform tank gunnery training, which would save lives.

The survey results reveal that when compared to current tank gunnery training, there is a need for revision. For example, during OIF, the gunner engaged targets 47 percent of the time, the loader 32 percent of the time, and the TC 21 percent of the time. The current Tank Table VIII qualification crewmember-to-target breakdown has the gunner shooting roughly 92 percent of the time, the loader 0 percent, and the TC 8 percent. Another example is that crews were forced to fire at multiple targets in close terrain. This increases the crew's observation area and also demands rapid response from all crewmembers. A final example is overemphasizing defensive gunnery (60 percent in gunnery versus 10 percent in OIF), tank targetry (almost 50 percent in gunnery versus 2 percent in OIF), and long-range engagements in our current gunnery training. These glaring differences mandate we adapt our gunnery training.

We are not saying that current gunnery training has ill prepared our crews for combat. On the contrary, we believe the emphasis on mastery of weapons systems, to include degraded modes, crew integration, and safety, were essential combat enhancers in preparing our crews to win decisively. Some shortfalls exist, which can be remedied with modifications to selected engagements of current gunnery tables.

Gunnery modifications must focus on two main areas. First, we have to reduce the "gamesmanship" of gunnery, which requires modification of the current scoring system. Presently, our scoring method rewards crews that master the intricacies of scoring. The brake time given for obscuration, experienced crews, to the detriment of combat training, have mastered stoppage and defilade. Crews need to fight through their problems, as opposed to using them to increase their scores. We believe that efforts by leaders to prevent crews from applying "gamesmanship" are doomed to fail. The only solution is a scoring system that rewards crews who fight their tanks. This might require giving partial points for "suppression" of targets — a crew that has a main gun malfunction could then use an alternate weapons system to engage and suppress a tank. We have to build an adaptive focus into our gunnery scoring, which will reward crews who use initiative and train as they will fight.

Second, we have to adapt tank gunnery to train crews for the asymmetrical fight. This means increasing crew close combat competence and integration. Modifications should be focused in crew capability and environment realism. Crew capability training focuses on better preparing tank crews to fight in close or urban terrain. The glaring conclusion here is that loaders must be trained to fight their weapons station. The loader's ability to use his M240 was essential to Task Force 1-64 Armor's survival in urban and close terrain. This requires upgrading the loader's weapons station for survivability (gun shields) and safety (M240B kits). The close fight also demands that TCs fight with .50 cals and be prepared to use personal weapons as well.

Engagements must force crews to engage enemy targets at short range, on the move, and with multiple weapons systems simultaneously. All of these changes can be implemented immediately with slight modifications to gunnery engagements. We will have to create a three-di-

mensional fight to replicate a realistic training environment. Possible solutions are mock buildings that can be assembled on ranges with targetry presented from basements to rooftops. Safety constraints may limit this training and force us to conduct close combat training in simulations or with multiple integrated laser engagement simulation (MILES). Regardless of the method chosen, crew and unit training for close combat is essential to maintaining our train-as-you-fight focus.

Rogue gunnery is a way to begin training crews for close combat. It offers an immediate solution that can be applied to crew live-fire training today. These modifications were intended to be a first-step approach to changes to tank crew training. We expect to build on our rogue gunnery experiences and that upgrades to training resources will permit more realistic and unit-level close combat training for our soldiers in the future. This near-term approach focuses on modifying tank gunnery engagements to better replicate the close fight, integrate all crewmembers' weapons systems, and build crew competence and confidence.

To modify tank crew gunnery, we first looked at the current 10-engagement package laid out in U.S. Army Field Manual 3-20.12, *Tank Gunnery (Abrams)*.[1] We attempted to identify redundancies in the engagement package, which we saw as potential opportunities to modify or implement changes. We then developed engagement scenarios that maintain a focus on safe crew training and the limitations of current ranges. We did not change our focus on safe training by retaining all of the current scoring and focus on crew fire commands. Finally, we tested our pilot program during gunnery density, which resulted in recommended changes to three target engagements.

Figure 1 shows recommended modifications to Tank Table VIII (A-day) engagement scenarios. The B3S task is assumed to be a daytime engagement. This allowed us to sustain some of the other day engagements that we felt trained essential skills. Of course any modifications that increase loader and TC integration of firing will have to be on the day portion of tank gunnery training.

On the A1 task, the engagement was modified to train the crew to integrate all machine gun fires. The first set of troops is presented with subsequent targets on a delay. This allows the TC to ensure the loader has properly identified the target and his M240 is oriented within the range fans. A personnel carrier (PC) target presents 15 seconds later for the TC to engage with .50-cal, allowing the loader and TC to simultaneously engage targets while in the defilade. A third set of troops presents a 25-second delay, which allows the TC to decide whether to have the loader (gunner traverses turret to the right) or gunner engage. The loader is given 100 rounds of 7.62mm ammunition to account for the limitations of the current weapons station. Scoring adjustments will have to be made to account for the longer time it takes the loader to engage troop targets. An M240B modification could possibly reduce both the scoring problem and the ammunition requirement to 50 rounds. Under current scoring standards, no break time is given for stoppage since there are three machine guns and the crew can switch to alternative weapons. This also reinforces the focus on training crews to fight through their problems.

On the A5 task, the engagement was modified to replicate a close fight on the offense. A moving PC presents with a second PC presenting on a 15-second delay. This allows the gunner to fire and adjust,

Proposed TT VIII Training — A (DAY)

Task #	CONDITIONS	Proposed TT VIII Targets		Ammunition 120mm SABOT	120mm HEAT	.50	7.62 mm TC	7.62 mm GNR	7.62 mm LDR	Training Intent: All tasks train target acquisition and crew integration/ synchronization/switchology
A1	DEF, GNR system Inop	Troops 15-second delay, exposed 35 sec	300-500m				100		x	Trains the LDR and TC to coordinate fires
		Stationary PC, 10-sec delay, exposed 50 sec	600-800m			100		x		
		Troops 25-sec delay, exposed 35 sec	300-500m				50		x	
A2 S	OFF-NBC	Stationary PC, exposed 75 sec	1400-1600m		1				x	Trains the GNR to engage enemy in NBC, also trains the crew to fight in NBC with change in weapons system
		Stationary PC, exposed 75 sec	600-800m		2				x	
		Troops 15-sec delay, exposed 60 sec	600-800m				50		x	
A3	DEF, LRF, GPS, TIS Inop	Stationary Turret, exposed 60 sec	700-900m	1					x	Trains the GNR to use the GAS
		Stationary Frontal Tank, exposed 60 sec	1000-1200m							
		Stationary Frontal Tank, exposed 60 sec	1400-1600m							
		Moving Tank, exposed 50 sec	1200-1400m	2					x	
A4	DEF- Long Range	Moving Tank, exposed 50 sec	2200-2400m	2					x	Trains the GNR to engage long-range targets
A5	OFF	Evasive Flank PC, exposed 50 sec	600-800m	1				x		Allows the LDR, GNR, or TC to engage troops based on crew decision
		Stationary PC 25-sec delay, exposed 50 sec	600-800m	2				x		
		Troops 40-second delay, exposed 75 sec	100-200m				50		x	
		Troops 40-second delay, exposed 75 sec	600-800m				50		x	
B3 S	DEF	Stationary Tank, exposed 75 sec	1400-1600m	2					x	Trains the crew to coordinate and integrate fires
		Defensive PC 15-sec delay, exposed 60 sec	700-900m			100			x	
		Troops 25-sec delay, exposed 50 sec	200-300m				50		x	
		Troops 25-sec delay, exposed 50 sec	300-500m				50		x	

Changes

Figure 1

"Second, we have to adapt tank gunnery to train crews for the asymmetrical fight. This means increasing crew close combat competence and integration. Modifications should be focused in crew capability and environment realism. Crew capability training focuses on better preparing tank crews to fight in close or urban terrain. The glaring conclusion here is that loaders must be trained to fight their weapons station." Photo by SPC Mason Lowery

and the TC to fire the .50-cal while on the move. After a 40-second delay, two sets of troops present, allowing the crew to engage with multiple weapons choices. This also trains the loader transition from loading to acquiring and engaging targets. To present this scenario safely, the tank had to be down range, allowing an expansion of the safe firing area. Additionally, crews had the option of performing a short halt based on TC evaluation of crew capability.

On the B3S task, which is similar to A1, the engagement was modified to train the crew to integrate all machine gun fires, while building the loader transition from loading to acquiring targets and firing. A stationary tank presents with a PC and two sets of troops on a 25-second delay. This allows the gunner to engage the tank and then transition the crew to close fighting of their weapons stations. The TC must ensure the loader has properly identified the target and his M240 is oriented within the range fans. The TC has numerous methods to attack this engagement. He can remain in defilade and attack with the loader and TC machine guns, or go to hull-down and include the gunner's coax machine gun.

To better prepare our tank crews for combat, we must *implement* OIF lessons learned into our gunnery program. This will ensure crews are prepared for both conventional and asymmetric fights in close terrain. Our proposals for gunnery are an immediate solution to current tank gunnery training. They build better crew integration and competence in all weapons systems and emphasize close fighting capabilities, while sustaining conventional skills. Future tank gunnery modifications should modify the current scoring system to reduce gamesmanship and teach crews to fight through problems. Additionally, we should develop live-firing scenarios that replicate the urban three-dimensional fight. These modifications will begin the process of training tank crews and units as they will fight.

Notes

[1]U.S. Army Field Manual 3-20.12, *Tank Gunnery (Abrams)*, U.S. Government Printing Office, Washington, D.C., 1 October 2001.

LTC Eric C. Schwartz is the battalion commander, 1st Battalion, 64th (1-64) Armor Regiment, 2d Brigade, 3d Infantry Division, Fort Stewart, GA. He received a B.A. from Lynchburg College and an M.A. from Clemson University. His military education includes Armor Officer Basic Course, Armor Officer Advanced Course, and U.S. Army Command and General Staff College. He has served in various command and staff positions to include, brigade XO, 3d Brigade, 4th Infantry Division, Fort Hood, TX; battalion XO and battalion S3, 1st Battalion, 68th Armor Regiment, 3d Brigade, 4th Infantry Division, Fort Hood; and company commander, A Company, 1-64 Armor, 2d Brigade, 24th Infantry Division.

MAJ Daniel Cormier is the battalion S3, 1-64 Armor, 2d Brigade, 3d Infantry Division, Fort Stewart, GA. He received a B.A. from the University of New Hampshire and an M.A. from Boston University. His military education includes Armor Officer Basic Course, Armor Officer Advanced Course, Scout Platoon Leaders Course, Cavalry Leaders Course, Airborne School, Ranger School, and Command and General Staff College-France. He has served in various command and staff positions, to include foreign area officer, Morocco; commander, C Troop, 1st Squadron, 2d Armored Cavalry Regiment, Fort Polk, LA; and tank and scout platoon leader, 2d Squadron, 11th Armored Cavalry Regiment, Germany.

SSG Bobby Burrell is the battalion master gunner, 1-64 Armor, 2d Brigade, 3d Infantry Division, Fort Stewart, GA. His military education includes Primary Leadership Development Course, Basic Noncommissioned Officers Course, Advanced Noncommissioned Officers Course, Airborne School, and M1A1 Master Gunners Course. He has served in various command and staff positions to include, company master gunner, B Company, 1-64 Armor, Fort Stewart; tank commander, B Company, 1-64 Armor, Fort Stewart; tank commander, C Company, 2d Battalion, 72d Armor Regiment, Camp Casey, Korea; and tank commander, C Company, 3d Battalion, 67th Armor Regiment, Fort Hood, TX.